Amendments to the Specification

Kindly amend the title at page 1 as follows:

METHOD [[AND APPARATUS]] FOR OPTICAL SYSTEM COHERENCE TESTING

Kindly amend the paragraph at page 1 of the specification between the names of the inventors and the subtitle "BACKGROUND OF THE INVENTION" as follows:

This application is a continuation-in-part of U.S. Application No. 09/783,406, filed February 15, 2001, now abandoned, which claims the benefit of U.S. Provisional Application No. 60/182,510, filed February 15, 2000.

Kindly amend paragraph 0042 as follows:

FIG. 3 shows the intersections of light diffracted through three pairs of openings in opaque plane P 104. Openings 102 and 202 are the same openings shown on FIG. 2. As they are separated by space s 204, light diffracted through openings 102 and 202 will intersect at point I 208, which is distance d [[204]] 206 away from opaque plane P 104. Above openings 102 and 202 are another pair of openings, 302 and 304. Openings 302 and 304 are separated by a space s_u 306. Light diffracted through openings 302 and 304 will intersect at a point I_u 308, which is a distance d_u 310 away from opaque plane P 104. As space s_u 306 is shorter than space s 204, distance d_u 310 is shorter than distance d 206. Below openings 102 and 202 are another pair of openings, 312 and 314. Openings 312 and 314 are separated by a space s_l 316. Light diffracted through openings 312 and

314 will intersect at a point I_1 318, which is a distance d_1 320 away from opaque plane P 104. As space s_1 316 is longer than space s 204, distance d_1 320 is longer than distance d 206.

Kindly amend paragraph 0064 as follows:

Returning to FIG. 17, one skilled in the art will appreciate that the diamond patterns 1710, 1720, 1730, and 1740 allow for the light beam to be sampled for coherence at a variety of locations within a cross section of the beam. The diamond pattern facilitates testing for both horizontal and vertical spatial coherence. Diffraction grating patterns 1712, 1722, 1732, and 1742 cause incident light to diffract to a larger degree than would occur in their absence. This enables interference zones to occur in a plane closer to transparent plate 802 so that less of the intensity of the light is lost to absorption. Opaque centers [[1712, 1722, 1732, and 1742]] 1714, 1724, 1734, and 1744 provide a dark background on which the interference zones can appear for observation and measurement. In FIG. 17, transparent plate 802 also provides for temporal (longitudinal) coherence to be measured. Recall from FIG. 1 that diffracted light bends in both directions about the line in the plane perpendicular to the plane of the opening. So, for example, if diffractive grating pattern 1712 has a measure of pitch different from the measure of pitch of diffractive grating pattern 1722, then light diffracted outward (towards opaque background 1750) from diamond pattern 1710 and from diamond pattern 1720 will intersect at a point such that the two diffracted beams will have different path lengths. An interference zone at this point of intersection can be used to measure temporal (longitudinal) coherence. One skilled in the art will recognize other

methods taught herein that can be used to facilitate measuring temporal (longitudinal) coherence with a transparent plate 802 as shown in FIG. 17 and with other arrangements.

Kindly amend the title at page 26 as follows:

METHOD [[AND APPARATUS]] FOR OPTICAL SYSTEM COHERENCE TESTING